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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/986,765 | 11/09/2001 | Joseph M. Leavitt | 2042.0020002/DJF | 5622 |

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| EXAMINER |
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BAYERL, RAYMOND J

| ART UNIT | PAPER NUMBER |
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2173

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/986,765 | LEAVITT ET AL. | |
| | Examiner | Art Unit | |
| | Raymond J. Bayerl | 2173 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 - 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1 - 28 is/are rejected.
- 7) Claim(s) 12 and 16 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 09 November 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4. | 6) <input type="checkbox"/> Other: _____ |

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

It should avoid using phrases which can be implied, such as, "The present invention" (line 4).

2.a. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

2.b. Also, fig 5 does not contain the reference numeral "502" that is described at page 14 of the specification.

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The disclosure is objected to because of the following informalities: It appears that "interface 2005" should have been a reference to numeral 2002, and that "infrastructure 2002" should properly refer to numeral 2006 (page 33 (paragraph [0128])).

Appropriate correction is required.

4. Claims 12, 16 are objected to because of the following informalities: please note the apparently-inadvertent addition of "the for" at the end of line 6 of claim 12, and the

manner in which claim 16 begins with a "fifth computer readable program code means" without there being a previous "fourth". Appropriate correction is required.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10, 22, 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, "the relative position" is recited without clear antecedent basis in parent claim 4. This limitation only first appears in claim 9. Note a similar difficulty with antecedent basis in claim 27.

Claim 22 is indicated as depending on independent claim 4, only it appears that claim 21 might have been intended as the parent, since there is no "customizer means" in claim 4. Dependence upon claim 21 has been presumed, in the interest of expediting prosecution.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 3, 12, 15, 17 – 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandt ("Mandt"; US #6,621,532 B1) in view of Sullivan ("Sullivan"; US #5,737,557).

As per independent claim 1's "displaying a user definable interface (UDI)" in a "cursor-based computing apparatus" (see also independent claims 15, 18), Mandt teaches an EASY METHOD OF DRAGGING PULL-DOWN MENU ITEMS ONTO A TOOLBAR, in which a user who frequently utilizes a menu item within a pull-down menu can convert frequently utilized menu items into toolbar buttons (Abstract; fig 4), as in assigning a "number of buttons" to "a command", "by dragging and dropping from one or more applications of the apparatus".

While Mandt identically discloses that the toolbar, as a "UDI", is defined according to user action, Mandt does not explicitly teach the format of "a plurality of buttons" that "is displayed in a relative position about a cursor position to reduce cursor commute". However, Sullivan's INTELLIGENT WINDOW USER INTERFACE involves a spot interface 10, which "upon activation" provides "a plurality of buttons" in the form of the collar 28 that yields a secondary interface (col 5, lines 22 – 49; fig 1).

It would have therefore been obvious to a person having ordinary skill in the art at the time of applicant's invention to use the toolbar customization of Mandt, by which

command elements are added according to user selection and manipulation, to populate a tool such as Sullivan's spot interface, with the motivation being to place a greater and more desirable assortment of selectable items as per Mandt within easy cursor access as per Sullivan.

Also not **explicitly** taught in Mandt is "permitting the user to select a visual appearance and shape of the UDI", but this technique is also found in Sullivan, where it supports variable suite window and icon sizes and appearances (col 4, lines 8 – 15). While Sullivan's appearances are identically shown as applying to the suite window 112 (fig 1B; col 6, lines 1 – 17), it would still have been further obvious to the person having ordinary skill that the Sullivan customization of appearance extend to the spot interface as well, when adapted per user manipulation as seen in Mandt, the additional motivation being to enhance further the usability via graphical specifications of the resulting collar 28 and its menu items, as seen in Sullivan.

As per claim 3's "activation by the user" from a list that "comprises at least one of", Sullivan's spot interface 10 is activated by "clicking on a mouse button". A similar line of reasoning applies to claim 20

Independent claim 12's "managing the UDI in response to user commands" also reads upon the toolbar customization of Mandt, especially as it might adapt a Sullivan spot interface. The "template that defines position" is used in Mandt , when an item is added to region 54, fig 4. The use of "a theme that defines attributes and commands" then follows from Sullivan's suggestion that appearances be controlled within an iconic interface. A similar line of reasoning applies to independent claim 17.

10. Claims 2, 16, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandt in view of Sullivan and Selker ("Selker"; US #6,549,219 B2).

As per the formation of "a first group of buttons and at least a second group of buttons", in which "commands" descend from "a first icon" to "the second group of buttons" in a hierarchy (claims 2, 16, 19), there is a certain basic use of hierarchy from the spot interface node of Sullivan, but this extent of "first" and "second" button arrangement is not **explicitly taught** within the Sullivan interface.

However, Selker's PIE MENU GRAPHICAL USER INTERFACE has a plurality of pie menu levels concentrically arranged (Abstract), as seen in fig 6. There, category headings appear within the center most section, while items increasing in granularity of menu items are in other regions—a selection of any one heading produces the related sub-headings in the level 2 menu selections (col 3, line 44 – col 4, line 3).

Thus, it would also have been obvious to the person of ordinary skill in the art to use a customizable, radial menu expressing the hierarchy claimed between "a first group" and a "second group" that is seen in the dynamic menuing of Selker, as an extension of the spot interface in Sullivan that contains custom commands as per Mandt, with the motivation being to produce a fully-flexible pop-up menu upon Sullivan's activation of the spot interface, one containing the most useful of commands.

11. Claims 4 – 11, 13 – 14, 21 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandt in view of Sullivan and Solimene et al. ("Solimene"; US #5,828,376).

Independent claim 4 (see also independent claims 13, 21), which involves "a template" for "the UDI" that expresses "attributes" and "commands" is suggested in general by the Mandt customization of the toolbar, when applied to the Sullivan spot interface. The Mandt/Sullivan combination does not **explicitly** teach the additional limitation regarding the options to have "default commands" and/or "default attributes", these being overridden by "at least one of user replacing and user extending of at least one of the default attributes and the default commands".

However, Solimene's MENU CONTROL IN A GRAPHICAL USER INTERFACE, in permitting the user to customize a default hyperitem and context sensitive pop-up menu by defining the associated hyperitems and their attributes clearly shows that it was known in the art to permit custom modifications to default items in a menu-based interface.

Thus, it would have been finally obvious to the person having ordinary skill in the art at the time of applicant's invention to allow the Mandt user to produce variations on either command or appearance parameters related to the Sullivan "UDI", in flexibly replacing "default commands" or "attributes" as per Solimene, the motivation being to provide the end user with a maximum capability to customize the "UDI" as is particularly necessary for that user's context. This user, as in claim 14, "is an end user".

As per claims 5, 22, the "customizer" in Sullivan "permits a user to hide the UDI", in that it is permissible to keep the spot interface at a minimized state (reference numeral 10 alone). This will also "hide a portion of the UDI" (claims 6, 23).

As in claims 7, 24 the spot interface will “display upon launch” of the root level menu seen in fig 1A of Sullivan, and will be “displayed in a relative position about a cursor position” (claims 9, 26). Claim 8’s invocation “from a system tray”, on the other hand (see also claim 25), is suggested by the manner in which Mandt’s toolbar rests in the high-level frame of fig 4.

In the extension as per Mandt, the “relative position” of the assorted command items are placed under “user” control (claims 10, 27), in the Sullivan radial menu display. Sullivant then suggests that a user may “scale the size of the UDI” (claims 11, 28), as noted above regarding appearances.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The additional prior art references made of record generally concern themselves with custom and radial-format menu interfaces, as are disclosed in the present specification.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Bayerl whose telephone number is (703) 305-9789 through the month of October 2004 and (571) 272-4045 thereafter. The examiner can normally be reached on M - F from 10:00 AM to 5:00 PM ET.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (703) 308-3116 through the month of October 2004 and (571) 272-4048 thereafter. All patent application related

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correspondence transmitted by FAX **must be directed** to the central FAX number (703) 872-9306.

15. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173

16 September 2004